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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,383	06/24/2003	Jose L. Sanchez Pina	DP-308856	1691
22851	7590	11/08/2004	EXAMINER	
DELPHI TECHNOLOGIES, INC.			WACHSMAN, HAL D	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			2857	

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/602,383

Applicant(s)

SANCHEZ PINA ET AL.

Examiner

Hal D Wachsman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 16, 17 and 19 is/are rejected.
- 7) ☒ Claim(s) 10-15 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-5-04</u> . | 6) <input type="checkbox"/> Other: _____  |

1. The Abstract is objected to because it contains legal phraseology (i.e. reads like a claim, "the sensing element comprising: a housing..."). Appropriate correction is required.
2. The first line on page 5 of the specification states "Referring now to Figures 1 and 2, force sensors 22..". However, Figure 1 does not illustrate the force sensors 22. Appropriate correction is required.
3. The specification is objected to because page 12, last line, of the specification states "Furthermore, no element, component, or method step in the present disclosure is intended to be dedicated to the public regardless of whether the element, component, or method step is explicitly recited in the claims" which is not in accordance with the requirements of 37 CFR 1.71 with respect to what a specification must include as what is cited on page 12 is not part of the written description of the invention and the manner and process of making and using the same. Appropriate correction is required.
4. Claims 10-15 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 10, lines 2 and 3, cite "the sensor array" however the antecedent basis appears to be "pair of sensor arrays". This same type of problem also occurs in claims 11-13. Claim 13 has a semicolon instead of a comma after the words "claim 11". Claims 14 and 15, cite "the pressure differential *signal*" which lacks clear antecedent basis. The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-9, 16, 17 and 19 are rejected under 35 U.S.C. 102(a) or 102(e) as being anticipated by Vogel et al. (6,578,416).

As per claim 1, Vogel et al. (Abstract, figure 1) disclose "a housing defining a conduit adapted to be in fluid communication with a fluid". Vogel et al. (Abstract, col. 3 lines 2-10, col. 5 lines 11-16) disclose "a pair of sensing arrays

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disposed within said conduit, said pair of sensing arrays being in a facing spaced relationship to define a gap disposed therebetween". Vogel et al. (see at least abstract) disclose "a plurality of sensors disposed on said pair of sensing arrays...provide signals corresponding to a plurality of parameters of said fluid". Vogel et al. (figure 6, col. 9 lines 5-18) disclose "a microprocessor adapted to receive the signals of said plurality of sensors...determine at least one condition of said fluid upon receipt of the signals corresponding to the plurality of parameters of said fluid".

As per claim 2, Vogel et al. (col. 2 lines 57-62, col. 4 lines 9-11, 42-44, 62-67, col. 6 lines 24-41, col. 8 lines 52-62) disclose the feature of this claim.

As per claim 3, Vogel et al. (see at least figure 1) disclose the feature of this claim.

As per claim 4, Vogel et al. (figure 1, col. 2 lines 22-24) disclose the feature of this claim.

As per claim 5, Vogel et al. (col. 7 lines 64-67, col. 8 lines 1-19) disclose the feature of this claim.

As per claim 6, Vogel et al. (figures 5, 6, col. 6 lines 24-41) disclose the feature of this claim.

As per claim 7, Vogel et al. (col. 7 lines 64-67, col. 8 lines 1-19) disclose the feature of this claim.

As per claim 8, Vogel et al. (figures 5, 6, col. 6 lines 24-41, col. 7 lines 64-67, col. 8 lines 1-19) disclose the feature of this claim.

As per claim 9, Vogel et al. (see at least figure 4) disclose the feature of this claim.

As per claim 16, Vogel et al. (Abstract, figure 6, col. 2 lines 16-19, 49-53) disclose the feature of this claim.

As per claim 17, Vogel et al. (Abstract, col. 7 lines 4-7, col. 9 lines 30-35, 45-51) disclose the feature of this claim.

As per claim 19, Vogel et al. (see at least abstract) disclose the feature of this claim.

7. Claims 10-15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and subject to the appropriate correction of the 37 C.F.R. 1.75(a) objections noted in paragraph 4 above.

8. The following references are cited as being art of general interest: Hannan et al. (6,138,508) which disclose a digital liquid level sensing apparatus, Suhre et al. (6,508,233) which disclose an engine control module of a fuel system, Kolosov et al. (US 2004/0107055 A1) which disclose application integrated circuitry for controlling fluid analysis, Livingston et al. (6,539,797) which disclose an auto-compensating capacitive level sensor, Freese, V et al. (5,604,441) which disclose an in-situ oil analyzer and Kauffman et al. (US 2004/0060344 A1) which disclose a sensor device for monitoring the condition of a fluid.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-

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2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Hal D Wachsman  
Primary Examiner  
Art Unit 2857

HW  
October 31, 2004